

DAFTAR PUSTAKA

- Adnan, M. 1997. *Teknik Kromatografi Untuk Analisis Bahan Makanan*. Penerbit Andi. Yogyakarta. 10:15-16.
- Alamsyah, A.N. 2006. *Taklukkan Penyakit dengan Teh Hijau*. Penerbit AgriMedia Pustaka. Jakarta.
- Andayani, R., Lisawati, Y., Maimunah. 2008. *Penentuan Aktivitas Antioksidan, Kadar Fenolat Total Dan Likopen Pada Buah Tomat*. *Jurnal Sains Dan Teknologi Farmasi*. 13(1) : 1-9.
- Anderson, R.F., Fisher, L.J., Hara, Y., Harris, T., Mak, W.B., Melton, D., dan Packer, J.F. 2001. *Green Tea Catechins Partially Protect DNA from $\cdot\text{OH}$ Radical-Induced Strand Breaks and Base Damage Through Fast Chemical Repair of DNA Radicals*. *Carcinogenesis*. 22(8):1189-1193.
- Ansel, H.C. 1989. *Pengantar Bentuk sediaan Farmasi* (4th ed.). UI Press. Jakarta.
- Bonni, T.Y., dan Choo Y.M. 2000. *Valuable Minor Constituents Of Commercial Red Palm Olein : Carotenoids, Vitamin E, Ubiquinones And Sterols*. *J Oil Palm Resarch*. 12 : 14-24.
- Brand-Williams, W., Cuvelier, M.E., dan Berset, C. 1995. *Use of a Free Radical Method to Evaluate Antioxidant Activity*. *Lebensmitel Wissenschaft und Technologie*. 29 : 25-30.
- Budiyanto, Agus dan Yulianingsih. 2008. *Pengaruh Suhu dan Waktu Ekstraksi Terhadap Karakter Pektin Dari Ampas Jeruk Siam (Citrus nobilis L.)*. *Jurnal Pascapanen*. 5(2) : 37-44.
- Cheong, M. H., Park, M. H., Kang, G. W., Ko, J. H., dan Seo, Y. J. 2005. *Determination of catechin compounds in Korean green tea infusions under various extraction conditions by High Performance Liquid Chromatography*. *Bulletin of the Korean Chemical Society*. 26(5) : 747–754.
- Chu, D.C. dan Juneja, L.R. 1997. *Chemistry and Applications of Green Tea*. General Chemical Composition of Green tea and Its Infusion. CRC Press LLC. USA : 13-21.
- Decker, E.A., Warner, K., Richards, M. P., dan Shahidi, F. 2005. *Measuring Antioxidant effectiveness in Food*. *Journal of Agricultural and Food Chemistry*. 53 : 4303-4310.
- Dhalimi, Azmi. 2006. *Permasalahan Gambir (Uncaria gambir L.) di Sumatera Barat dan Alternatif Pemecahannya*. *Perspektif*. Bogor 5 (1) : 26-59.

- Droge W. 2002. *Free Radicals In The Physiological Control Of Cell Function*. *Physiol Rev*. 82 : 47-95.
- Fessenden, R.J., and Fessenden, J.S. 1986. *Organic Chemistry*. Dialihbahasakan oleh Pudjaatmaka, A.H. *Kimia Organik* (3rd ed.). Erlangga. Jakarta.
- Foust, A.S. 1959. *Principles of Unit Operations*. McGraw-Hill Book Company. Singapore : 88-90.
- Frankel, E.N. 1998. *Lipid Oxidation*. Oily Press, Scotland.
- Geankoplis, C.J. 1983. *Transport Processes and Unit Operation*. Allyn and Dalcon Inc. Boston, USA.
- Gordon, M.H. 2001. *Measuring Antioxidant Activity*. Dalam: Jan Pokorny, Nedyalka, Yanishlieva-Maslarova, and Michael Gordon (ed.). *Antioxidant in Food Practical Application*. Woodhead Publishing Ltd. London.
- Gray, J.I. 1987. *Simple Chemical And Physical Methods For Measuring Flavor Quality Of Fats And Oils*. In : Min, D.B. and Smouse, T.H. (ed.). *Flavor Chemistry Of Fats And Oils*. The American Oil Chemistry Society : 223-229.
- Gray, J.I., and Monahan, F.J. 1992. *Measurement Of Lipid Oxidation In Meat And Meat Products*. *Trend Food Sci. Tech*. 3 : 315-319.
- Hadad, EA dkk. 2007. *Teknologi Budidaya dan Pengolahan Hasil Gambir*. Balai Penelitian Tanaman Rempah dan Aneka Tanaman Industri. Balai Besar Penelitian dan Pengkajian Teknologi Pertanian.
- Hagerman, A.E. 2002. *Condensed Tannin Structural Chemistry*. Department of Chemistry and Biochemistry, Miami University, Oxford, OH 45056.
- Halliwell, B and Gutteridge, J.M.C. 2000. *Free Radical in Biology and Medicine*, Oxford University Press, NewYork.
- Harborne, J.B. 1987. *Metode Fitokimia Penuntun Cara Modern Menganalisa Tumbuhan*. Dialihbahasakan oleh Kosasih Padmawinata. ITB. Bandung.
- Hernani dan Mono Raharjo. 2005. *Tanaman Berkhasiat Antioksidan*. Penerbit Swadaya. Jakarta.
- Hiller K dan Melzig M.F. 2007. *Die große Enzyklopaedie der Arzneipflanzen und Drogen*. Elsevier Spektrum Verlag. Heidelberg.(bagian kandungan bahan)
- Hoa, C.H.L., Cacacea, J.E., dan Mazza, G. 2007. *Extraction Of Lignans, Proteins And Carbohydrates From Flaxseed Meal With Pressurized Low Polarity Water*. 40 : 1637–1647.

- Koleva, I.I. van Beek, T.A. Linssen, J.P.H. de Groot, A. Evstatieva, L.N. 2001. *Screening Of Plant Extracts For Antioxidant Activity: A Comparative Study On Three Testing Methods*. *Phytochem. Analysis*. 13: 8–17.
- Kozai, K., M.Soto, N. Yamaguchi, N.Nagasaka and S.Pradopo.1995. *Potential Of Gambir as an Inhibitor Of Dental Plaque Formation*. *Dent Journal*. 28(3): 95-96.
- Lee, K.W. Kim, Y. J. Lee, H.J. and Lee, C.Y. 2003. *Cocoa Has More PhenolicPhytochemical and a Higher Antioxidant Capacity than Teas and Redwine*. *J. Agric. Food Chem*. 51(25) : 7292-7295.
- Lenny, S. 2006. *Senyawa Flavonoida, Fenilpropanoida, dan alkaloda*. Karya ilmiah. Departemen Kimia. FMIPA. Medan : Universitas Sumatera Utara.
- Lucida, H. 2006. *Determination Of The Ionization Constant And The Stability Of Catechin From Gambir (Uncaria gambir (Hunter) Roxb)*. *ASOPMS 12 International Conference*. Padang. November 2006.
- Manthey, J. A. 2004. *Fractionation Of Orange Peel Phenols In Ultrafiltered Molasses And Mass Balance Studies Of Their Antioxidant Levels*. *Journal of Agricultural and Food Chemistry*. 52 : 7586-7592.
- Mardiah. 2010. *Ekstraksi Kelopak Bunga Dan Batang Rosella (Hibiscus sabdariffa L)*. Universitas Djuanda Jurusan Teknologi Pangan dan Gizi. Bogor.
- Marxen, K. Vanselow K.H., Lippemeier S., Hintze, R., Ruser, A dan Hansen, U.P. 2007. *Determination of DPPH Radical Oxidation Caused by Methanolic Extracts of Some Microalgal Species by Linear Regression Analysis of Spectrophotometric Measurements*.
- Nakiboglu, M. Urek, R.O. Kayali, H.A. dan Tarhan, L. 2007. *Antioxidant Capacities Of Endemic Sideritis Sipylea And Origanum Sipyleum From Turkey*. *Food Chemistry*, 104 : 630–635.
- Nasrun. 1990. *Pengaruh Ektrak Daun Gambir Tehada Jamur Fusarium oxysporum schledt Penyebab Layu Tanaman Cab. Manggaro Jurnal Hama dan Penyakit*. 1 (2) : 8-10.
- Nasrun. 2001. *Pemanfaatan Catechin Ekstrak Daun Gambir Sebagai Fungisida Nabati Dalam Pengendalian Penyakit Layu Tanaman Tomat*. *Stigma IX* (1) : 54-57.
- Natsume, M. dkk. 2000. *Analysis of Polyphenols in Cacao Liquor, Cocoa, And Chocolate By Normal-Phase and Reversed-Phase HPLC*. *Biosci. Biotechnol. Biochem*. 64 : 2581–2587.
- Nawar, W.W. 1996. *Lipids*. Dalam Fennema OR (ed.). *Food Chemistry* (3rd ed.) Marcel dekker. New York.

- Nazir, M. 2000. *Gambir : Budidaya, Pengolahan dan Prospek Diversifikasinya*. Yayasan Hutanku. Padang.
- Nugroho, B., Malau, D.P., Rokhmanto, F., Laili. N. 2008. *Pengaruh Suhu Ekstraksi Terhadap Kandungan Kurkuminoid dan Air Pada Serbuk Temulawak (Curcuma xanthorrhiza)*. Diklat Metode Penelitian Dan Pengolahan Data Lembaga Ilmu Pengetahuan Indonesia.
- Nurdjanah, N. dan Usmiati, S. 2006. *Ekstraksi Dan Karakterisasi Pektin Dari Kulit Labu Kuning*. *Jurnal Penelitian Pascapanen Pertanian*. 3 (1) :13–23.
- Ohtani, dkk. 2000. *New Antioxidant From The African Medicinal Herb Thonginia Sanguinea*. *J Nat Prod*. 63 : 676-679.
- Osakabe, N., Yasuda, A., Natsume, M., Takizawa, T., Terao, J. dan Kondo, K. 2001. *Catechins and Their Oligomers Linked by C4→C8 Bonds Are Major Cacao Polyphenols*. *Experimental Biology And Medicine*. 227 : 51-56.
- Ozyurt, D. dkk. 2005. *Determination Of Total Antioxidant Capacity By A New Spectrophotometric Method Based On Ce(IV) Reducing Capacity Measurement*. New York. Elsevier Applied Science.
- Pambayun, R., Gardjito, M., Sudarmadji, S., Kuswanto, K. R. 2007. *Kandungan Fenol Dan Sifat Antibakteri Dari Berbagai Jenis Ekstrak Produk Gambir (Uncaria gambir Roxb.)*. *Majalah Farmasi Indonesia*. 18(3):141–146.
- Prakash, A. 2001. *Antioxidant Activity*. Medallion Laboratories : Analithycal Progres. 19(2): 1–4.
- Pratt, D.E. dan Hudson, B.J.F. 1990. *Natural Antioxidants not Exploited Commercially*. Didalam: B.J.F. Hudson (ed.). *Food Antioxidants*. Elsevier Applied Science. London.
- Prior, R.L., Wu, X., dan Scaich, K. 2005. *Standardized Methods For the Determination of Antioxidant Capacity and Phenolics in Foods and Dietary Supplements*. *J. Agric. Food Chem*. 53 : 4290-4302.
- Purwani, M.V., Suyanti, dan Muhadi, A.W. 2008. *Ekstraksi Konsentrat Neodimium Memakai Asam Di- 2 - Etil Heksil Fosfat*. Seminar Nasional IV SDM Teknologi Nuklir . 25-26 Agustus 2008 Yogyakarta : 439-438.
- Ramadhan, A.E. dan Phaza, H.A. 2010. *Pengaruh Konsentrasi Etanol, Suhu Dan Jumlah Stage Pada Ekstraksi Oleoresin Jahe (Zingiber officinale Rosc) Secara Batch*. *Skripsi*. Fakultas Teknik Universitas Diponegoro. Semarang.
- Rauf, R., Santoso, U., Suparmo. 2010. *Aktivitas Penangkapan Radikal DPPH Ekstrak Gambir (Uncaria gambir Roxb)*. *Agritech*. 30 (1) : 1-5.
- Reische, D.W., Lillard, D.A., Eitenmiller, R.R. 2002. *Antioxidants*. Dalam Akoh, C.C., dan Min, D.B. (ed.). *Food Lipids Chemistry, Nutrition, and*

Biotechnology (2nd ed.) Revisen and Expanded. Marcel Dekker, Inc. New York.

Robinson, P. 1995. *Kandungan Organik Tumbuhan Tinggi*. Dialihbahasakan oleh Padmawinata, K. (6th ed.). Institute Teknologi Bandung. Bandung. 193.

Roswita, R. 1998. *Prospek Gambir di Sumatera Barat*. BIP (01) Padang h. 8-10.

Ruenroengklin, N., Zhong, J., Duan, X., Yang, B., Li, J., Jiang, Y. 2008. *Effects Of Various Temperatures And Ph Values On The Extraction Yield Of Phenolics From Litchi Fruit Pericarp Tissue And The Antioxidant Activity Of The Extracted Anthocyanins*. *International Journal of Molecular Science*. 9: 1333–1341.

Santoso, U., Rauf, R., Pambayun, R., Suparmo, Hadiwiyoto, S., Rahayu, K. 2008. *Identification Of Antioxidants Isolated From Gambir (Uncaria gambir Roxb)*. Abstract. 14th World Congress Of Food Science & Technology, IUFOST-CIFST, Shanghai, China, 19-23 Oktober 2008.

Setiyowati, V., 2007. *Karakterisasi dan Pengujian Aktivitas Antioksidan Tabelt Effervescent Ekstrak Teh Hijau Pada Lama Ekstraksi dan Jenis Bahan Pengisi yang Berbeda*, Skripsi Mahasiswa Jurusan Teknologi Hasil Pertanian, Fakultas Teknologi Pertanian, Universitas Brawijaya.

Shadmani, A. dkk. 2004. *Kinetic Studies On Zingiber Officinale*. *Pakistan Journal of Pharmaceutical Sciences*. 17 : 47-54.

Shahidi, F., dan Wanasundara, U.N. 2002. *Methods For Measuring Oxidative Rancidity in Fats and Oils*. Dalam Akoh, C.C., dan Min, D.B. (ed.). *Food Lipids Chemistry, Nutrition, and Biotechnology* (2nd ed.) Marcel Dekker, Inc. New York.

Singleton, V.L., dan Rossi, J.A. 1965. *Colorimeter Of Total Phenolics With Phosphomolibdic-Phosphotungstic Acid Reagents*. *American Journal Of Enology And Viticulture*. 16 : 144-158.

Smallwood, I.M. 1999. *Solvent Recovery Handbook*. (2nd ed.). CRC Press. Canada.

Soebagio, E.B., Ibnu, M.S., Widarti, H.R., dan Munzil. 2003. *Kimia Analitik II*. Malang: IMSTEP JICA UNM : 34.

Sousa, A. dkk. 2008. *Effect Of Solvent And Extraction Temperatures On The Antioxidant Potential Of Traditional Stoned Table Olives Alcaparras*. 41: 739–745.

Suherdi, A. Denian dan H. Syamsu. 1991. *Budidaya Dan Pasca Panen Gambir Serta Permasalahannya*. Biro Bina Pengembangan Sarana Perekonomian. Dati I Sumbar. Padang.

- Susanti, Devi Yuni. 2008. *Efek Suhu Pengeringan Terhadap Kandungan Fenolik Dan Kandungan Katekin Ekstrak Daun Kering Gambir*. Prosiding Seminar Nasional Teknik Pertanian Yogyakarta. 18-19 November 2008.
- Suyitno, Haryadi, Supriyanto, Suksmadji, haryanto, Guritno, A.d., dan Supartono, W. 1989. *Petunjuk Laboratorium Rekayasa Pangan*. PAU Pangan dan Gizi UGM. Yogyakarta.
- Taniguchi, S., Kuroda, K., Doi, K., Tanabe, M., Shibata, T., Yoshida, T., dan Hatano, T. 2007. *Revised Structures of Gambirin A1, A2, B1, and B2, Chalcane-Flavan Dimers from Gambir (Uncaria Gambir Extract)*. *Chemistry Pharmaceutical Bulletin*. 55 (2) : 268-272.
- Towle, G.A. and Christensen, O. 1973. *Pectin*. Dalam R.L. Whistler (ed.) *Industrial Gum*. Academic Press. New York.
- Treyball, R.E. 1981. *Mass-Transfer Operations*. (3rd ed.). Mc Graw-Hill. New York. 717-723.
- Trilaksani, W. 2003. *Antioksidan : Jenis, Sumber, Mekanisme Kerja dan Peran Terhadap Kesehatan*. Institute Pertanian Bogor. Bogor. 1-12.
- Tuminah, S., 2004. *Teh [(Camellia sinensis O.K. var. Assamica (Mast)] Sebagai Salah Satu Sumber Antioksidan*. Pusat Penelitian dan Pengembangan Pemberantasan Penyakit, Balai Penelitian dan Pengembangan Kesehatan, Departemen Kesehatan RI, Jakarta, Cermin Dunia Kedokteran. 144 : 52-54.
- Voight, R. 1995. *Buku Pelajaran Teknologi Farmasi*. Dialihbahasakan oleh Soewandhi, S.N. (5th ed.). Gadjah Mada University Press. Yogyakarta. 564.
- Wang, R. dan Zhou W. 2004. *Stability of Tea Catechin in Bread Making Process*. *Journal Agricultural Food Chemistry*. 52 : 8224 -8229
- Welty, R.J., Wicks, E.C., Wilson, E.R., dan Rorrer G. 2004. Dialihbahasakan oleh Gunawan Prasetyo *Dasar-Dasar Fenomena Transport*. Edisi Ke-4:3. Jakarta: Erlangga.
- Wright M.R. 2004. *An Introduction of Chemical Kinetics*. Chichester. John Wile & Sons, Ltd.
- Yap, C. F., Ho, C. W., Aida, W. M., Chan, S. W., Lee, C. Y., dan Leong, Y. S. 2009. *Optimization Of Extraction Conditions Of Total Phenolic Compounds From Star Fruit (Averrhoa carambola L.) Residues*. *Sains Malaysiana*. 38(4):511 – 520.
- Yu Lin, H. Kuo, Y.H. Lin, Y.L. dan Chiang, W. 2009. *Antioxidative effect and active components from leaves of lotus (Nelumbo nucifera)*, *Journal of Agricultural and Food Chemistry*. 57: 6623–6629.

- Zamarel dan Risfaheri. 1991. *Perkembangan Penelitian Tanaman Industri Lain*. Balai Penelitian Tanaman Rempah dan Obat. Bogor. *Edisi Khusus Littro* VII(2):12-16.
- Zeijlstra, F.Z.N. 1943. *Sirih, Pinang en Gambier*. Dalam C.J.J. van Hall en C. van de Koppel (Eds.). *Landbouw in Indische Archipel*, W. van Hoeve's. Gravenhage.
- Zhang, H.F., Yang, X.A., Zhao, L.D., dan Wang, Y. 2009. *Ultrasonic-Assisted Extraction Of Epimedin C From Fresh Leaves Of Epimedium And Extraction Mechanism*. *Innovative Food Science and Emerging Technologies* 1.